HOFFMAN WARNICK D ALESSANRO LLC #7285 P.003

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II. AMENDMENT TO SPECIFICATION

Please amend the title, as follows:

SEMICONDUCTOR MODULE <u>WITH IMPROVED INTERPOSER STRUCTURE</u> AND METHOD FOR FORMING THE SAME

Please amend paragraph [0019] starting on page 5, line 21, as follows:

[0019] In any event, interposer structure 16 generally comprises a elastomeric, compliant material 20 having metallurgical through connections 18 "embedded" or "positioned" therein. Metallurgical through connections 18 electrically connect under bump metallization (UBM) or bottom layer metallurgy (BLM) 22 of semiconductor chip 12 to top surface metallurgy (TSM) 24 of substrate 14. In a typical embodiment, interposer structure 16 can comprise an anisotropic conductive film, such as Cupil T CUPIL T, which is commercially available from Nitto Denko, Inc. of Osaka, Japan. Moreover, metallurgical through connections 18 can be formed to have a predetermined shape depending on the load applied to semiconductor module 10 to best optimize the contact. For example, metallurgical through connections 18 could be spherical, ellipsoid, sshaped, c-shaped, or elongate (i.e., column-like). various factors can be considered when determining the shape of metallurgical through connections 18. Such factors include, among other things: (1) camber (i.e., non-flatness of substrate 14 and semiconductor chip 12) in that more camber might mean taller through connections with an overall greater degree of compressibility; (2) distortion (i.e., positional accuracy of the I/O pads on substrate 14) in that the worse the distortion, the bigger the contact area on metallurgical through connections 18 that would have to be provided so that some degree of contact is always present between

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metallurgical through connections 18 and the I/O pads; and (3) process considerations such as how the through connections are made. In addition, metallurgical through connections 18 could be formed from one or more materials. To this extent, metallurgical through connections 18 could have a core formed from Copper, Copper-Beryllium, or the like that is coated with gold. Still yet, UBM 22 and/or TSM 24 could be gold, solder or the like.

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